Group Art Unit: 3738

Examiner: David A. Izquierdo Atty. Docket No.: 101896-662 (DEP5055)

AMENDMENTS TO THE CLAIMS

- 1. (Currently Amended) An anterior method for implanting an artificial disc in an intervertebral space of the human body, comprising:
 - a) fixing a position of a midline marker such that a portion of the midline marker embeds in a face of a vertebral body;
 - b) inserting a distraction instrument into the intervertebral space using the midline marker as a guide;
 - c) selecting an artificial disc for implantation; and
 - d) inserting the artificial disc in the intervertebral spacing space using the midline marker as a guide.
- 2. (Original) The anterior method of claim 1, further comprising verifying a disc for artificial disc implantation.
- 3. (Original) The anterior method of claim 2, wherein verifying a disc for artificial disc implantation includes:

centering a verification instrument on the disc;

inserting at least one radiopaque pin extending from the verification instrument into the disc;

visualizing via X-ray the radiopaque pin in the disc; and removing the verification instrument from the disc after visualization.

4. (Original) The anterior method of claim 3, further comprises:

inserting the midline marker in a guide of the verification instrument; and impacting a proximal end of the midline marker until the midline marker is embedded in the face of the vertebral body.

- 5. (Canceled)
- 6. (Currently Amended) The anterior method of claim 1, wherein preparing the disc for artificial disc implantation includes:

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removing a window from the annulus of the disc, where the window is the width of an artificial disc implant; and

removing [the] a nucleus pulposus of the disc.

7. (Previously Presented) The anterior method of claim 1, wherein selecting an artificial disc for implantation, includes:

distracting the intervertebral space with a distraction instrument;

inserting at least one trial spacer into the distracted intervertebral space with a trial spacer insertion instrument, the trial spacer instrument guided into the intervertebral spacer by the distraction instrument; and

removing the trial spacer insertion instrument from the intervertebral space.

8. (Previously Presented) The anterior method of claim 7, further comprises:

contacting the trial spacer insertion instrument with a midline marker insertion instrument;

inserting the midline marker in the face of the vertebral body with the midline marker insertion instrument while being guided by the trial spacer insertion instrument; and removing the midline marker insertion instrument from the midline marker.

- 9. (Previously Presented) The anterior method of claim 1, further comprises shaping adjacent endplates of the vertebral bodies which define the intervertebral space with an endplate shaping instrument being guided by the midline marker.
- 10. (Original) The anterior method of claim 9, wherein the step of shaping adjacent endplates of the vertebral bodies, comprises:

aligning an endplate shaping instrument with the midline marker;

inserting shaping blades of the endplate shaping instrument into the intervertebral space; and

shaping the adjacent endplates of the vertebral bodies with the shaping blades.

11. (Canceled)

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12. (Previously Presented) The anterior method of claim 1, wherein implanting the artificial disc in the intervertebral space includes:

inserting endplates of the artificial disc into the intervertebral space using an endplate insertion instrument, the endplate insertion instrument guided by the distraction instrument;

removing the distraction instrument from the intervertebral space, thereby allowing the endplates of the artificial disc to engage vertebral endplates;

inserting a core between the endplates of the artificial disc using a core insertion instrument, the core insertion instrument guided by the endplate insertion instrument; removing the core insertion instrument from the endplate insertion instrument; and removing the endplate insertion instrument from the intervertebral space.

13. (Currently Amended) The <u>anterior</u> method of claim 12, wherein inserting a core between the endplates further includes securing the core between the endplates of the artificial disc with a retention clip.

14-53. (Withdrawn)

- 54. (New) An anterior method for implanting an artificial disc in an intervertebral space of the human body, comprising:
 - fixing a position of a midline marker such that a portion of the midline marker embeds in a face of a vertebral body;
 - b) inserting a distraction instrument into the intervertebral space using the midline marker as a guide;
 - c) selecting an artificial disc for implantation; and
 - d) inserting the artificial disc in the intervertebral spacing using the midline marker as a guide, further comprising:

inserting endplates of the artificial disc into the intervertebral space using an endplate insertion instrument, the endplate insertion instrument guided by the distraction instrument;

removing the distraction instrument from the intervertebral space, thereby allowing the endplates of the artificial disc to engage vertebral endplates;

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inserting a core between the endplates of the artificial disc using a core insertion instrument, the core insertion instrument guided by the endplate insertion instrument;

removing the core insertion instrument from the endplate insertion instrument; and

removing the endplate insertion instrument from the intervertebral space.

- 55. (New) The anterior method of claim 54, wherein inserting a core between the endplates further includes securing the core between the endplates of the artificial disc with a retention clip.
- 56. (New) An anterior method for implanting an artificial disc in an intervertebral space of the human body, comprising:
 - a) fixing a position of a midline marker such that a portion of the midline marker embeds in a face of only a single vertebral body;
 - b) inserting a distraction instrument into the intervertebral space using the midline marker as a guide;
 - c) selecting an artificial disc for implantation; and
 - d) inserting the artificial disc in the intervertebral spacing using the midline marker as a guide.
- 57. (New) The anterior method of claim 56, further comprising verifying a disc for artificial disc implantation.
- 58. (New) The anterior method of claim 57, wherein verifying a disc for artificial disc implantation includes:

centering a verification instrument on the disc;

inserting at least one radiopaque pin extending from the verification instrument into the disc;

visualizing via X-ray the radiopaque pin in the disc; and removing the verification instrument from the disc after visualization.

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59. (New) The anterior method of claim 58, further comprises:

inserting the midline marker in a guide of the verification instrument; and impacting a proximal end of the midline marker until the midline marker is embedded in the face of the single vertebral body.

60. (New) The anterior method of claim 56, wherein preparing the disc for artificial disc implantation includes:

removing a window from the annulus of the disc, where the window is the width of an artificial disc implant; and

removing a nucleus pulposus of the disc.

61. (New) The anterior method of claim 56, wherein selecting an artificial disc for implantation, includes:

distracting the intervertebral space with a distraction instrument;

inserting at least one trial spacer into the distracted intervertebral space with a trial spacer insertion instrument, the trial spacer instrument guided into the intervertebral spacer by the distraction instrument; and

removing the trial spacer insertion instrument from the intervertebral space.

62. (New) The anterior method of claim 61, further comprises:

contacting the trial spacer insertion instrument with a midline marker insertion instrument;

inserting the midline marker in the face of the single vertebral body with the midline marker insertion instrument while being guided by the trial spacer insertion instrument; and removing the midline marker insertion instrument from the midline marker.

- 63. (New) The anterior method of claim 56, further comprises shaping an endplate of the single vertebral body and an adjacent endplate of an adjacent vertebral body which define the intervertebral space with an endplate shaping instrument being guided by the midline marker.
- 64. (New) The anterior method of claim 63, wherein the step of shaping the endplate of the single vertebral body and the adjacent endplate of the adjacent vertebral body, comprises:

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aligning an endplate shaping instrument with the midline marker; inserting shaping blades of the endplate shaping instrument into the intervertebral space; and

shaping the endplate of the single vertebral body and the adjacent endplate of the adjacent vertebral body with the shaping blades.

65. (New) The anterior method of claim 56, wherein implanting the artificial disc in the intervertebral space includes:

inserting endplates of the artificial disc into the intervertebral space using an endplate insertion instrument, the endplate insertion instrument guided by the distraction instrument;

removing the distraction instrument from the intervertebral space, thereby allowing the endplates of the artificial disc to engage vertebral endplates;

inserting a core between the endplates of the artificial disc using a core insertion instrument, the core insertion instrument guided by the endplate insertion instrument; removing the core insertion instrument from the endplate insertion instrument; and removing the endplate insertion instrument from the intervertebral space.

66. (New) The anterior method of claim 12, wherein inserting a core between the endplates further includes securing the core between the endplates of the artificial disc wit ha retention clip.